Part 60 vs Part 75
Monitoring Requirements

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Part 60 vs. Part 75 Monitoring

- Part 60 monitoring is based upon 40 CFR 60:
  - Appendix B; Performance Specifications, and
  - Appendix F; Quality Assurance Procedures

- Part 75 monitoring is based upon 40 CFR 75:
  - Appendix A; Specifications and Test Procedures, and
  - Appendix B; Quality Assurance and Quality Control Procedures

CLEAN AIR MARKET PROGRAMS

Differences

- Span and Range requirements
- Calibration Drift vs Calibration Error Check
- Cylinder Gas Audit (CGA) vs Linearity Check
- RATA Requirements
- Reference Method differences
- Moisture Monitoring Requirements

Span and Range Requirements

- Usually specified by the applicable subpart of part 60
- Part 75 Appendix A, §2 provides instruction for calculating span
  - Objective: To set the range such that a majority of the readings are between 20% and 80% of the range selected
  - Span is equal to 1.0 to 1.25 times the Maximum Potential Concentration (MPC) or Maximum Potential Flow (MPF)
  - Periodic adjustments of the span and range requirement, Part 75, Appendix A §2.1.2.5

Span vs Range

- The span is the calculated, quality assured portion of a monitor's measurement range

- The range is the actual setting of the monitor

- Range is always ≥ Span

Calibration Drift vs Calibration Error Check

	40 CFR 60	40 CFR 75
Performance Specifications (PS)	- 2.5% of Span for NO_x - 0.5% O_2 or CO_2	- 2.5% of Span for NO_x, or ($\leq$ 5 ppm for spans < 200 ppm) - 0.5% O_2 or CO_2
Out-of-Control Period	- First failed test over 4x the specification, or - Fifth consecutive failure over 2x the PS (5% of span)	- First failed test over 2x the performance specification (5% of span) or alternate std

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Cylinder Gas Audit (CGA) vs Linearity Check

40 CFR 60; CGA

- 2 gases: Low (20-30% of span) and Mid (50-60% of span)
- Criteria < 15% or ± 5 ppm
- Performed 3 quarters per year, quarter with the RATA is exempt
- Tester may use protocol gases or may elect to use alternative no. 2

40 CFR 75; Linearity

- 3 gases: Low (20-30% of span), Mid (50-60% of span), and High (80-100% of span)
- Criteria < 5% or ± 5 ppm
- Performed every QA operating quarter
- Protocol gases required

CLEAN AIR MARKET PROGRAMS

Part 60 vs Part 75
RATA Requirements

40 CFR 60

- RA $\leq$ 20% or 10% of the applicable emission standard for NO_X
- RA $\leq$ 20% or $\pm$ 1.0 % CO_2 or O_2
- Test to be conducted with unit operating at more than 50% capacity or at normal load
- Repeat every four calendar quarters

40 CFR 75

- RA $\leq$ 10% or $\pm$ 15 ppm for NO_X
- RA $\leq$ 10% or $\pm$ 1.0 % CO_2 or O_2
- Test to be conducted with unit operating at normal load as specified by 75 App A, §6.5.2.1
- Repeat every 2 QA operating quarters unless RA $\leq$ 7.5%, then repeat every 4 QA operating quarters

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Reference Method differences

- 40 CFR 60; test methods are specified in the applicable subpart

- 40 CFR 75; test methods are specified in §75.22.
  - Not all of the sections in the reference methods are adopted in Part 75 (note Appendix A, §6.5.10 for total NOx)

Moisture Monitoring Requirements

- Part 75 requires moisture monitors to pass a moisture RATA
- Method 4 is the reference method for moisture monitoring systems
- An oxygen RATA is not acceptable for wet/dry oxygen moisture monitoring systems under part 75
- Temperature/psychrometric lookup table systems are not required to pass a RATA